

NUCLEAR STRUCTURE DATA FOR THE PRESENT AGE

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The US Nuclear Data Program maintains and provides easy and free access to several comprehensive databases that assist scientists to sift through and assess the vast quantity of published nuclear structure and decay data. These databases are an invaluable asset for nuclear-science experimentalists and theorists alike, and the recommended values provided for nuclear properties such as decay modes, level energies and lifetimes and radiation properties can also be of great importance to specialists in other fields such as medicine, geophysics, and reactor design. The Evaluated Nuclear Structure Data File (ENSDF) contains experimental nuclear structure data for all known nuclides, evaluated by the US nuclear data program evaluators in collaboration with a number of international data groups; the Nuclear Science Reference (NSR) database provides complementary bibliographic information; the Experimental Unevaluated Data Listing (XUNDL) exists to enable rapid access to experimental nuclear structure data compiled from the most recent publications (primarily in high-spin physics). This talk will present an overview of the nuclear structure and decay data available through these databases, with emphasis on recent and forthcoming additions to and presentations of the available material.

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